

ABSTRACT

An aqueous polymer dispersion having a minimum film-forming temperature of below +65°C comprising at least one film-forming polymer in the form of dispersed polymer particles comprising a polymer phase P1 and a different polymer phase P2, the polymer dispersion being obtainable by free-radical aqueous emulsion polymerization comprising the following steps: i) polymerization of a first monomer charge M1 to give a polymer P1 having a theoretical glass transition temperature $T_g^{(1)}$ (according to Fox) and ii) polymerization of a second monomer charge M2 to give a polymer P2 having a theoretical glass transition temperature $T_g^{(2)}$ (according to Fox) which is different from $T_g^{(1)}$ in the aqueous dispersion of the polymer P1, at least one chain transfer reagent being used either in the polymerization of the monomer charge M1 or in the polymerization of the monomer charge M2; a process for preparing the aqueous polymer dispersion; and a pigmented and/or filled coating composition comprising as a binder the aqueous polymer dispersion.